

Notice of Allowability

Application No.

09/709,800

Examiner

Barry J. O'Brien

Applicant(s)

KAO ET AL.

Art Unit

2183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 8/11/04.
2. ☒ The allowed claim(s) is/are 3-8, 11-16, and 21-22, which have been renumbered as 1-6, 7-12 and 13-14, respectively.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20041026.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20041026</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jiawei Huang on 10/25/04.

The application has been amended as follows:

2. Please replace claim 3 with the following claim:

An apparatus for processing data, said apparatus comprising:

A special register bank of N-bit data processing registers;

A general register bank of N-bit data processing registers;

A selector, coupled to the special register bank and the general register bank, for selecting one of the special and general register banks and outputting a selected N-bit result from the selected register bank in according to a class signal received by the selector, wherein the selected N-bit result and a N-bit data form a 2N-bit addition operand, wherein the class signal is used for indicating either a first class of instruction or a second class of instruction, ~~and wherein the selected N-bit result and a N-bit data form a 2N-bit addition operand;~~

A multiplier for performing multiply operation upon a first operand and a second operand and outputting an 2N-bit multiplied result;

One accumulator, coupled to the multiplier, the selector and the general register bank, for performing accumulate operation upon the 2N-bit multiplied result and the 2N-bit addition operand and outputting a 2N-bit accumulated result.

3. Please replace claim 15 with the following claim:

The method for processing data of claim ~~[[9]]~~ 11, further comprising a step of receiving the 2N-bit accumulated result and checking if a case of overflow occurs.

4. Please cancel claims 17-20.

5. Please replace claim 21 with the following claim:

An apparatus for processing data, said apparatus consisting of:

A special register bank of N-bit data processing registers;

A general register bank of N-bit data processing registers;

A selector, coupled to the special register bank and the general register bank, for selecting one of the special and general register banks and outputting a selected N-bit result from the selected register bank in according to a class signal received by the selector, wherein the selected N-bit result and a N-bit data form a 2N-bit addition operand, wherein the class signal is used for indicating either a first class of instruction or a second class of instruction;

A multiplier for performing multiply operation upon a first operand and a second operand and outputting an 2N-bit multiplied result;

An accumulator, coupled to the multiplier, the selector and the general register bank, for performing accumulate operation upon the 2N-bit multiplied result and the 2N-bit addition operand and outputting a 2N-bit accumulated result,

A detecting device, coupled to the accumulator, for receiving the 2N-bit accumulated result and for checking if a case of overflow occurs.

Drawings

6. The Examiner approves the changes to Fig.1 submitted on 12/30/03. However, new corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because no clean copy of the proposed drawing change was submitted accompanying the marked-up copy submitted on 12/30/03. Because the application is now in condition for allowance, formal drawings are now required. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry J. O'Brien whose telephone number is (571) 272-4171. The examiner can normally be reached on Mon.-Fri. 6:30am-4:00pm, with the exception of first Friday of every bi-week.

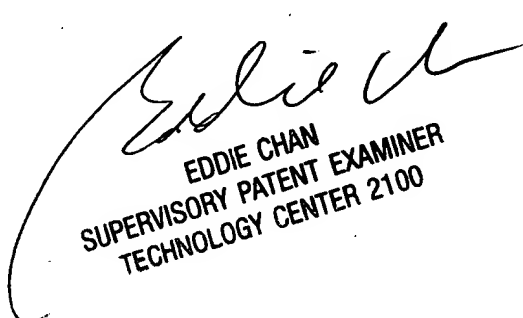
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached at (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2183

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Barry J. O'Brien
Examiner
Art Unit 2183

BJO
10/26/2004



EDDIE CHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100